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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,970	10/31/2003	R. Rox Anderson	CDL-026C3	8805
42532	7590	11/13/2006	EXAMINER	
PROSKAUER ROSE LLP ONE INTERNATIONAL PLACE 14TH FL BOSTON, MA 02110			WOO, JULIAN W	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,970

Applicant(s)

ANDERSON ET AL.

Examiner

Julian W. Woo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimers filed on August 28, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration dates of U.S. Patent Nos. 5,810,801; 6,120,497; and 6,659,999 have been reviewed and are accepted. The terminal disclaimers have been recorded, and they overcome the double patenting rejections in the Office action of March 23, 2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16, 17, 19, 20, 22-24, 26, 28, 30-33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Donnell, Jr. (6,096,029). O'Donnell, Jr. discloses, at least in the figures and in col.3, line 10 to col. 4, line 45; a method of inducing remodeling of the skin, where the method includes generating a beam of radiation having a wavelength of between about 1.3 and 1.8 microns (see col. 3, lines 28 and 29), directing the beam of radiation to a targeted dermal region, cooling an epidermal region above the targeted dermal region, and causing sufficient thermal injury to the targeted dermal region; where the beam of radiation has a fluence between 10

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and 150 joules per square centimeter (see col. 3, lines 19-25), where cooling of the epidermal region is performed during the step of causing thermal injury (see col. 4, lines 14-24), where collagen is partially denatured in the targeted dermal region, eliciting a healing response and increasing extracellular matrix constituents (by photocoagulation; see col. 1, lines 24-28 and col. 3, lines 9-14).

4. Claims 16, 21, 23, 27, 30, 36, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Donnell (6,106,514). O'Donnell discloses, at least in col. 4, line 30 to col. 5, line 50 and in col. 6, lines 46-60 a method of inducing remodeling of the skin, where the method includes generating a beam of radiation having a wavelength of between about 1.3 and 1.8 microns (see col. 4, lines 49-52), directing the beam of radiation to a targeted dermal region, cooling an epidermal region above the targeted dermal region, and causing sufficient thermal injury to the targeted dermal region; where collagen is partially denatured in the targeted dermal region, eliciting a healing response and increasing extracellular matrix constituents (by photocoagulation; see col. 4, line 59 to col. 5, line 8). O'Donnell also discloses post-operative, topical treatment of irradiated skin in order to promote new collagen formation and minimize inflammation, i.e., activating fibroblasts which increases amounts of extracellular matrix constituents (including accelerating collagen synthesis) in the targeted dermal region.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 18, 25, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell, Jr. (6,096,029). O'Donnell, Jr. discloses the inventions substantially as claimed, but does not disclose directing a beam of radiation to a target dermal region between 100 microns and 1.2 mm below a wrinkle in the skin.

Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to direct the beam of radiation to the depth as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art.

7. Claims 38-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell (6,106,514). O'Donnell discloses the method of treating skin substantially as claimed, including the stretching of skin relative to a wrinkle (see col. 6, lines 6-10, where "firm pressure" upon the skin from a handpiece would induce stretching of the skin as well as deepening of the depth of photocoagulation). However, O'Donnell does not disclose a beam of radiation with a wavelength having a tissue absorption coefficient in the range of 1 and 20 cm⁻¹. Nevertheless, the Applicant has disclosed that

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a wavelength in the range of 1.3 to 1.8 microns would effect a tissue absorption coefficient in the range of 1 and 20 cm^{-1} . O'Donnell discloses a wavelength in the range of 800 nanometers to 1.79 microns, that includes the range as disclosed by the Applicant. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to apply a beam of radiation with a wavelength having a tissue absorption coefficient in the range of 1 and 20 cm^{-1} . Such a wavelength is poorly absorbed by melanin in the epidermis and by hemoglobin in the dermal blood vessels, and it allows the beam of radiation to be transmitted through the epidermis and effect shrinkage of the dermis.

Response to Amendment

8. Applicant's remarks with respect to claims 16-45 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian W. Woo whose telephone number is (571) 272-4707. The examiner can normally be reached Mon.-Fri., 7:00 AM to 3:00 PM Eastern Time, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julian W. Woo
Primary Examiner

November 8, 2006